



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,857	03/11/2004	James F. Brown	832_001 DIV3	7179
25191	7590	06/11/2008		
BURR & BROWN PO BOX 7068 SYRACUSE, NY 13261-7068			EXAMINER CHIN, CHRISTOPHER L	
			ART UNIT	PAPER NUMBER
			1641	
			MAIL DATE	DELIVERY MODE
			06/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I – claims 1-8 and 132-146 in the reply filed on 3/5/08 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 9-42 and 58-131 are withdrawn from consideration.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Cottingham (US Patent 5,795,748) for the reasons of record.

4. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Cottingham (US Patent 5,948,673) for the reasons of record.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 132-146 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cottingham (US Patent 5,795,748) or Cottingham (US Patent 5,948,673).

Cottingham (US Patent 5,795,748) or Cottingham (US Patent 5,948,673) differ from the instant invention in the specific volumes of sample analyzed and specific volumes of the sample chamber recited in claims 132-138 and 140-146.

However, the optimum volume of sample that is to be analyzed can be determined by routine experimentation and thus would have been obvious to one of ordinary skill in the art.

However, the optimum volume of the sample chambers can be determined by routine experimentation and thus would have been obvious to one of ordinary skill in the art.

With respect to claim 139, the optimum number of sample chambers can also be determined by routine experimentation and thus would have been obvious to one of ordinary skill in the art.

Response to Arguments

7. Applicant's arguments filed 10/31/07 have been fully considered but they are not persuasive.

In response to the 102(e) rejections over the Cottingham references, Applicants argue that the 20 ul volume taught by Cottingham is too big to detect an amplified product from a single target molecule. Applicants submitted an article by Kalinina et al to support their argument.

Applicant's argument has been considered but is not persuasive. Applicant has not provided any experimental evidence to show that amplified production from a single target molecule cannot be detected in the 20 ul volume taught by Cottingham. With respect to the Kalinina et al reference, this reference is no substitute for experimental evidence. Kalinina et al do not use the methods or devices of Cottingham. What is shown in Kalinina et al does not prove that one cannot detect PCR product from a single target molecule in 20 ul volume. It should also be noted that Kalinina et al is not commensurate with the instant methods since 30 cycles of PCR were used (page 1999, right column) instead of the single round of PCR recited in the instant claims. Also, the instant claims are not limited to the use of a single target molecule. The instant claims recite the use of "at least one target nucleic acid molecule".

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher L. Chin whose telephone number is (571) 272-0815. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571) 272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher L. Chin/
Primary Examiner, Art Unit 1641

6/8/08